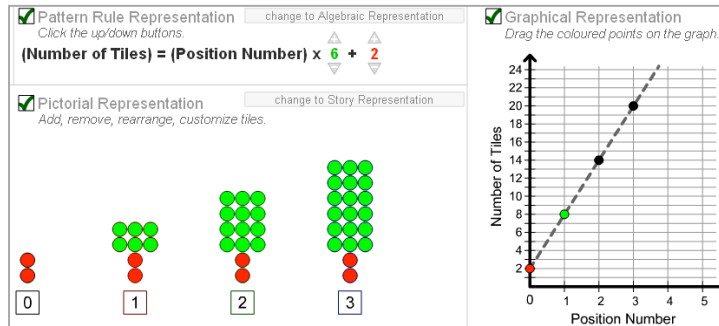


## BLM LGP 1.3 Expectations and Big Ideas

### Big Ideas for Linear Growing Patterns



### Ontario Curriculum Expectations

	Big Ideas for Mathematical Relationships	Big Ideas for Linear Growing Patterns	Gr 7 - represent linear growing patterns (where the terms are whole numbers) using concrete materials, graphs, and algebraic expressions;	Gr 7 - model real-life linear relationships graphically and algebraically, and solve simple algebraic equations using a variety of strategies, including inspection and guess and check	Gr 8 - represent linear growing patterns (where the terms are whole numbers) using graphs, algebraic expressions, and equations	Gr 8 - model linear relationships graphically and algebraically, and solve and verify algebraic equations, using a variety of strategies, including inspection, guess and check, and using a "balance" model	Gr 9 AP - apply data-management techniques to investigate relationships between two variables	Gr 9 AP - determine the characteristics of linear relations	Gr 9 AP - demonstrate an understanding of constant rate of change and its connection to linear relations	Gr 9 AP - connect various representations of a linear relation, and solve problems using the representations.
1	Algebraic reasoning is a process of describing and analyzing (e.g., predicting) mathematical relationships and change using words and symbols.	1. The study of the mathematical structure of patterns is a foundation to algebraic reasoning.								
2	Different representations of relationships (e.g., numeric, graphic, geometric, algebraic) highlight different characteristics or behaviours, and can serve different purposes.	2. The mathematical structure of a linear growing pattern (e.g., numeric, graphical, geometric, algebraic) can be represented in different ways. Different representations highlight different characteristics and can serve different purposes.								
3	Comparing mathematical relationships helps us see that there are classes of relationships and provides insight into each member of the class.	3. Linear growing patterns can be distinguished from other patterns by the way they grow.								
4	Limited information about a mathematical relationship can sometimes, but not always, allow us to predict other information about that relationship.	4. Two pieces of information about a linear growing pattern can be sufficient information to fully describe the pattern.								